

GHDL and gtkwave Commands

OV Shashank

Email 1: [shashankov\[at\]ee.iitb.ac.in](mailto:shashankov[at]ee.iitb.ac.in)

Email 2: [y.mahajan456\[at\]gmail.com](mailto:y.mahajan456[at]gmail.com)

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- As a follow up to today's session, you can find here the commands used in the tutorial today.
- Please direct any queries to both of the email ids mentioned above.

GHDL

- Analysis: Syntax Checking of the VHDL File and addition to the Work Library.
Necessary for every vhd file.
Command: `ghdl -a <vhd-file-name>` Example: `ghdl -a 2_adder.vhdl`
- Elaboration: Compilation of file including components used
Necessary for entities w/o inputs like testbenches.
Command: `ghdl -m <entity-name>` Example: `ghdl -m adder_tb`
- Running: Running the VHDL code
Necessary for entities w/o inputs like testbenches after Elaboration.
Command: `ghdl -r <entity-name> [OPTIONS]` Example: `ghdl -r adder_tb`
Additional Options (Optional) (after <entity-name>)
 - `--vcd=<output-file-name>`: Creates VCD Dump (Waveform File)
Example: `ghdl -r adder_tb --vcd=out.vcd`
 - `--stop-time=<time>`: Stops Simulation at Specified Time
Example: `ghdl -r adder_tb --stop-time=4ns --vcd=out.vcd`

GTKWAVE

Command: `gtkwave <file-name>` Example: `gtkwave out.vcd`